

AMENDMENTS TO THE SPECIFICATION

Please insert the following paragraph between lines 12 and 13 of page 14:

Fig. 7 is a view partially sectional view of an inline screw plasticizing injection apparatus showing a mode for carrying out the invention, where the angle between end faces of the weir plate and the check ring and the horizontal axis is set to 70°.

Please replace the paragraph beginning on page 12, line 23 and ending on page 13, line 1, with the following amended paragraph:

The invention is further characterized in that an angle of θ between end faces of the weir plate (22) and the check ring (26) and a vertical horizontal axis is set to 70 through 90° in the inline screw plasticizing injection apparatus.

Please replace the paragraph on page 16, lines 2-13, with the following amended paragraph:

First, an explanation will be given of a characteristic of the screw head portion of the mode for carrying out the invention. In the molten resin path 34 formed in JP-A-6-246802, according to the mode for carrying out the invention, as shown by Fig. 1, by restraining the ratio of the path width B in the direction orthogonal to the flow direction of the resin path to the screw diameter (D) to 3 through 6 % and constituting an angle θ between the end faces of the check ring 26 and the weir plate 22 and a vertical horizontal axis by 70 through 90°, the seal function in injection can be promoted while restraining various properties provided by a long fiber resin mixture to plastically required levels as mentioned later.

Please replace the paragraph beginning on page 16, line 14 and ending on page 17, line 7, with the following amended paragraph:

The angle θ between the end faces of the weir plate 22 and the check ring 26 and the vertical horizontal axis is constituted by 70 through 90° because when the angle θ is equal to or smaller than 60°, in comparison with the angle of 70 through 90°, the molten resin is liable to flow and therefore, there is a drawback that the molten resin is liable to flow back from the side of the chamber 15 to the side of the screw 14 by passing the resin flow path 34 during a time period until the check ring 26 is closed in starting injection and in order to improve the drawback, it is necessary to reduce the path width B to be equal to or smaller than 3% of the screw diameter (D) to thereby increase breakage of glass fibers. Therefore, by increasing a flow resistance thereof from the side of the chamber 15 to the side of the screw 15 by constituting the angle θ between the end faces of the weir plate 22 and the check ring 26 and the vertical horizontal axis to be 70 through 90°, the flow back amount during the time period until closing the path width B by bringing the check ring 26 into contact with the weir plate 22 can be reduced and the molding stability can be promoted.

Please replace paragraph beginning on page 20, line 6 and ending on page 21, line 9, with the following amended paragraph:

Further, it is also effective for restraining breakage of glass fibers at the resin flow path 34a in the horizontal direction that the width (W) of the check ring 26 excluding the projection 26' of the check ring 26 is constituted by 0.3 through 0.4 times the screw diameter (D) in a range in which leakage of resin from an outer periphery of the check ring 26 does not hinder actual

production. That is, the width (W) is constituted by 0.3 through 0.4 times the diameter (D) because when the width is smaller than 0.3 times the diameter (D), a flow back amount from a clearance between the outer periphery of the check ring 26 and the inner wall of the heating cylinder 12 is increased, an amount of advancing the screw 14 during a pressure maintaining step after finishing to charge the material is increased and when the screw 14 reaches a frontmost position, the pressure cannot be maintained, a failure of sink mark is produced and dimensional accuracy is deteriorated. On the other hand, when the width (D) is larger than 0.4, although the above-described drawback is not brought about, since the resin flow path 34a in the horizontal direction having the path width (A) is prolonged and therefore, breakage of long glass fibers tends to increase. In this way, by constituting the width (W) by 0.3 through 0.4 times 0.4D, compatibility of preventing leakage of resin from the outer periphery of the check ring 26 and breakage of fibers at the resin flow path 34a on the inner face of the check ring 26 can be achieved. By the above-described synergic effects, there can be constructed a constitution promoting the plasticizing function, promoting the seal function in injection and reducing breakage of long glass fibers.

Please replace the paragraph on page 31, lines 1-15, with the following amended paragraph:

By restraining the path width B in the direction orthogonal to the flow direction of the molten resin flow path 34 to 3 through 6 % of the screw diameter, constituting the angle θ between the end faces of the weir plate 22 and the check ring 26 and the vertical horizontal axis to be 70 through 90°, and providing the projection 26' on the front side of the check ring 26 to fit to the notch of the screw head 20 to thereby constitute to rotate the check ring 26 along therewith

in rotating the screw, and setting the width of the check ring to 26 to 0.3 through 0.4 times the screw diameter (D), the seal function is promoted while restraining breakage of glass fibers to the practically required level and therefore, there is achieved an effect of capable of carrying out stable molding without producing a failure in molding of short shots, burrs and the like.

Please replace the paragraph on page 33, lines 17-24, with the following amended paragraph:

According to the invention, by the constitution of setting the angle θ between the end faces of the weir plate and the check ring and the vertical horizontal axis to 70 through 90°, the flow resistance from the side of the chamber to the side of the screw is increased and as a result, the flow back amount until closing the molten resin path (B) by bringing the check ring into contact with the weir plate is reduced and the molding stability is promoted.